DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claim 1-7, 9, 15-17 and 33-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Mater (US 2004/0198125) and in view of Wu et al. (US 3,713,879). The previous Office Action of 1/29/2008 is maintained. Applicant noted that Examiner omitted claims 2, 5, 33 and 34 from the previous Office Action rejection statement, but as the claims were responded to in the body of the rejection, Examiner has made the correction to include these claims in the rejection statement.

Response to Arguments

2. Applicant's arguments filed 3/13/2008 have been fully considered but they are not persuasive. Applicant argues there is no motivation to combine Mater with Wu because Mater: 1) teaches that both category 1 and category 2 fibers are required and

the category 3,4,5 and 6 fibers are optional and 2) Mater teaches away from the current application by requiring the use of inherently flame retardant compounds and fibers containing halides and 3) Mater teaches away from coated fibers as Mater teaches the disadvantages of coated fibers. Mater teaches fibers blends in examples I where one layer of the mattress quilt panel has 60% modacrylic with 20% melamine and 20% low melt binder [0128]. This blend is in the range of the claimed blend of 6-25% low melt binder and 25-75% synthetic and/or natural fiber not coated with an FR material wherein any inherent FR fiber is FR rayon. While Mater teaches the combination of category 1 and 2 fibers is more preferable than reliance on just category 1 fibers that is because Mater is teaching that the oxygen depleting gases generated by category 2 fiber can provide a benefit [0094]. Based on that teaching of Mater, Mater does not exclude blends that do not include category 2, or halogen based inherent FR fibers. In other words, Mater does teach that only category 1 fibers can be used in a blend. As to Applicants argument 3) that Mater teaches away from coated fibers because Mater teaches the disadvantages of FR coated fibers. Mater nevertheless teaches that coated FR fibers are known in the art and Mater's disclosure is teaching the advantages of combining category 1 and category 2 fibers with blends of binder fibers and natural and/or synthetic fibers. However the 35 USC 103(a) rejection presented herein is that based on the teachings of Mater in combination with Wu, it would have been obvious to combine the features of the prior art to produce a flame retardant material. As Mater and Wu presents findings of types of FR fibers, inherent and coated, one of ordinary

skill in the art could have combined and substituted the fibers of Mater and Wu and the results of the combination would have been predictable.

3. Applicant argues that Wu is teaching an FR coating for a ***fabric*** and is not drawn to coating the ***fibers.*** Wu teaches "the fibrous material can be treated in the form of woven or knitted or nonwoven fabrics and the treatment can be applied to yarns, thread or it may be applied to ***fibers*** or ***filaments*** in the form of loose or bulk masses" (col. 12, lines 47-51). Wu also states earlier in this paragraph, that the "treatment to impart flame retardancy to fibrous material may be applied to any fibrous material containing primarily cellulosic fibers such as cotton, viscose rayon, cupra ammonium, cellulose rayon, or mixture of cotton/polyester fibers. Products which can be flame retarded and which are fabricated from the above ***fibers*** include wall paper, mattress covers, etc" (col. 12, 9-28). As disclosed, Wu teaches the individual fibers can be coated with the FR material and then formed into a fabric. Therefore Wu presents a finding that one of ordinary skill in the art could of employed the technique of coating a fiber with an FR compound and produced a fabric with a reasonable expectation of success. As Mater teaches blends of fibers, inherently FR fibers, binder fibers and synthetic and/or natural fibers and Wu teaches FR coated fibers, one of ordinary skill in the art could of combined the known features of Mater and Wu and the results of producing a flame retardant fabric would have been predictable.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER STEELE whose telephone number is (571)272-7115. The examiner can normally be reached on Office Hours Mon-Fri 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S./
Examiner, Art Unit 1794

/Elizabeth M. Cole/
Primary Examiner, Art Unit 1794

6/18/2008